VI. CLAIMS

I claim:

1. A method of managing animals, comprising the steps of:
   a. producing a female of a species of mammal;
   b. inseminating said female of said species of mammal with an artificial insemination sample having a plurality of spermatozoa, wherein at least 90% of said plurality of spermatozoa have a sex determination characteristic corresponding to the same sex of offspring mammal;
   c. fertilizing at least one egg within said female of said species of mammal; and
   d. producing said offspring mammal.

2. The method of managing animals as described in claim 1, wherein said sex determination characteristic comprises an X-chromosome.

3. The method of managing animals as described in claim 1, wherein said sex determination characteristic comprises an Y-chromosome.

4. The method of managing animals as described in claim 1, wherein said female of said species of mammal is selected from the group consisting of bovids, ovids, equids, canids, felids, and porcine.

5. The method of managing animals as described in claim 1, wherein said female of said species of mammal comprises a bovine species of mammal.

6. The method of managing animals as described in claim 5, wherein said plurality of spermatozoa comprises a number of spermatozoa selected from the group consisting of no more than 10 million live non-frozen spermatozoa, no more than 5 million live non-frozen spermatozoa, no more than 3 million live non-frozen spermatozoa, no

more than 1 million live non-frozen spermatozoa, no more than 500,000 live non-frozen spermatozoa, no more than 250,000 live non-frozen spermatozoa, and no more than 100,000 live non-frozen spermatozoa.

7. The method of managing animals as described in claim 5, wherein said plurality of spermatozoa comprises a number of spermatozoa selected from the group consisting of no more than 10 million frozen-thawed spermatozoa, no more than 6 million frozen-thawed spermatozoa, no more than 5 million frozen-thawed spermatozoa, no more than 3 million frozen-thawed spermatozoa, no more than 1 million frozen-thawed spermatozoa, no more than 500,000 frozen-thawed spermatozoa, no more than 250,000 frozen-thawed spermatozoa, and no more than 100,000 frozen-thawed spermatozoa.

8. The method of managing animals as described in claim 1, wherein said female of said species of mammal comprises an equine species of mammal.

9. The method of managing animals as described in claim 6, wherein said plurality of spermatozoa comprises a number of spermatozoa selected from the group consisting of no more than 25 million live non-frozen spermatozoa, no more than 15 million live non-frozen spermatozoa, no more than 10 million live non-frozen spermatozoa, and no more than 5 million live non-frozen spermatozoa.

10. The method of managing animals as described in claim 6, wherein said plurality of spermatozoa comprises a number of spermatozoa selected from the group consisting of no more than 25 million frozen-thawed spermatozoa, no more than 15 million frozen-thawed spermatozoa, no more than 10 million frozen-thawed spermatozoa, and no more than 5 million frozen-thawed spermatozoa.

11. The method of managing animals as described in claim 1, wherein said plurality of spermatozoa comprises a number of spermatozoa from about 10% to about 50%

relative to a typical number of spermatozoa in an artificial insemination sample.

12. The method of managing animals as described in claim 1, wherein said offspring mammal comprises a male, and wherein the percentage of male offspring mammals is selected from the group consisting of at least 70% male offspring mammals, at least 80% male offspring mammals, and at least 90% male offspring mammals.

13. The method of managing animals as described in claim 1, wherein said offspring mammal comprises a female, and wherein the percentage of female offspring mammals is selected from the group consisting of at least 70% female offspring mammals, at least 80% female offspring mammals, and at least 90% female offspring mammals.

14. The method of managing animals as described in claim 1, further comprising the step of inducing early puberty in said female of said species of mammal.

15. The method of managing animals as described in claim 14, wherein said female of said species of mammal comprises a female of a bovine species of mammal, and wherein said step of inducing early puberty in said female of said bovine species of mammal comprises inducing puberty by nine months after birth.

16. The method of managing animals as described in claim 14, wherein said step of inducing early puberty in said female of said bovine species of mammal comprises inducing said early puberty between about 250 days after birth to about 270 days after birth.

17. The method of managing animals as described in claim 14, wherein said step of inducing early puberty in said female of said bovine species of mammal comprises feeding said female of said bovine species of mammal a sufficient ration of feed to produce an average weight gain of about 1.3 kilograms per day to about 1.4 kilograms

per day.

18. The method of managing animals as described in claim 14, further comprising the step of early weaning of said female of said species of mammal.

19. The method of managing animals as described in claim 18, wherein said female of said species of mammal comprises said female of said bovine species of mammal, and wherein said step of early weaning comprises weaning said female of said bovine species of mammal at between about 95 days to about 125 days after birth.

20. The method of managing animals as described in claim 18, wherein said step of inseminating said female of said bovine species of mammal comprises insemination of said female of said bovine species of mammal between about 283 days after birth to about 316 days after birth.

21. The method of managing animals as described in claim 18, further comprising the step of synchronizing estrous.

22. The method of managing animals as described in claim 21, wherein said step of synchronizing estrous comprises:

a. dressing feed with MGA at 0.5 milligrams per female of said bovine species of mammal per day for 14 days; and

b. injecting PGF2 19 days after the last day of dressing said feed with said MGA.

23. The method of managing animals as described in claim 22, further comprising the step of harvesting said female of said species of mammal.

24. The method of managing animals as described in claim 23, wherein said step of harvesting said female of said species of mammal comprises harvesting said female

of said bovine species of mammal prior to 24 months.

25. The method of managing animals as described in claim 23, wherein said step of harvesting said female of said species of mammal comprises harvesting said female of said bovine species of mammal prior to 30 months.

26. The method of managing animals as described in claim 23, further comprising the step of replacing said female of said species of mammal with said offspring mammal.

27. The method of managing animals as described in claim 3, further comprising the step of harvesting said male offspring mammal.